bioenergetics, biomembranes and transport, (3) structure and function of nucleic acids, (4) molecular immunology and (5) low molecular weight bioregulators. These subject headings alone indicate the breadth of topics covered by this book, but also within these subheadings one finds a wide range of subject areas. For example the section on peptides and proteins contains 16 contributions which cover such diverse areas as peptide synthesis, conformation studies by NMR, carbohydrate-binding proteins, crystallisation of proteins and thermodynamic analysis of conformational changes. Because of the diversity of areas covered this is not a book that will be of particular interest to those concerned only with their own specialist areas. There are, for example, only 5 contributions in the section on molecular immunology and 6 on low molecular weight bioregulators. However, for those with broader interests this book offers a fine collection of very readable state-of-the-art descriptions, written by experts in the field in each area covered. Unfortunately, the price ($120) will ensure that the book will probably not find its way into many personal collections, although it should prove a most useful addition to many libraries.

John M. Walker

## *From Gene to Animal*

by David De Pomerai

*Cambridge University Press; Cambridge, 1985*

193 pages. £8.95

There are not many books available at the advanced student level which deal with the molecular biology of animal development. This is the area covered by this book, and it seems to me to do so very successfully.

The organization is well planned and commendably easy to follow. Each chapter starts with a 1–2 page summary, giving the main conclusion drawn from each of its 5–10 component sections. Within each section, the text is packed full of factual information, though not in a way that is indigestible or tiresome to read. The figures include many diagrams which are also full of detailed information; although many are complicated and annotated with very small print, they have been very carefully prepared, and if studied in detail are entirely comprehensible and very informative.

The facts and discussion in the text are referenced to original papers in journals. Over 500 such papers are listed with titles at the end of the book. The author has drawn fairly liberally from such texts as Davidson's (1976) book on Gene Activity in Development (fully acknowledged).

The book consists of seven chapters. The first three are concerned entirely with molecular biology, and cover such topics as gene structure and sequences, chromatin structure and composition, transcription and post-transcriptional processing. Chapter four deals with some general aspects of development including oogenesis, embryonic induction, etc. The last three chapters each cover a particular topic in detail: erythropoiesis and globin genes; yolk protein genes; and insect development, including salivary gland puffs, homeotic genes, and compartments. It might be felt inappropriate to devote nearly half the book (chapters 1–3) to a background of molecular biology before beginning to discuss development; but not to have done so would have meant assuming familiarity with the methods used in development, and hence aiming the book at a higher level. As it is, I found the book to be an excellent combination of molecular biology and development. It therefore complements other books, such as that of Sang (1984, Genetics and Development, Longman) which devotes much more emphasis to genetics and less to molecular biology.

J.B. Gurdon